DOCUMENT RESUME

ED 421 073 HE 031 418

AUTHOR Lerner, Robert; Nagai, Althea K.
TITLE Preferences at the Service Academies. Racial, Ethnic, and Gender Preferences in Admissions to the U.S. Military Academy and the U.S. Naval Academy.
INSTITUTION Center for Equal Opportunity, Washington, DC.
PUB DATE 1998-00-00
NOTE 22p.
AVAILABLE FROM Center for Equal Opportunity, 815 15th St., Suite 928, Washington, DC 20005; Phone: 202-639-0803; Fax: 202-639-0827; world wide web: http://www.ceousa.org
PUB TYPE Reports - Research (143)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Academic Standards; *Affirmative Action; Asian Americans; Black Students; *College Admission; *College Applicants; College Outcomes Assessment; Ethnic Groups; Graduation; Higher Education; Hispanic Americans; *Military Schools; *Minority Groups; Racial Factors; *Sex Differences; Statistical Analysis; White Students
IDENTIFIERS *Military Academy (West Point) NY; *Naval Academy MD

ABSTRACT

This study used statistical analysis to determine the extent to which racial, ethnic, and gender preferences are affect admissions policies of the U.S. Military Academy at West Point (New York) and the U.S. Naval academy at Annapolis (Maryland). The study used data for all applicants for the fall 1995 freshman class that included racial or ethnic group membership, gender, verbal and math scores on the Scholastic Assessment Tests (SAT), and high school class rank. Data are presented in text, figures, and tables for the following factors: racial and ethnic differences in admission rates; sex differences in admission rates; differences in admittee qualifications between whites and blacks, between whites and Hispanics, and between whites and Asians; and gender differences in admittee qualifications. A section on computing the odds of admission uses logistic regression to show effects of racial and ethnic group membership and of gender on admission chances. Data are also presented which show how preferences affect graduation rates and the admission of less-qualified black and Hispanic students over Asian and white applicants. A breakdown of the data by each of the two schools is also provided. (DB)

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ED 421 073

Preferences at the Service Academies

Racial, Ethnic, and Gender Preferences in Admissions to the U.S. Military Academy and the U.S. Naval Academy

By Robert Lerner, Ph.D. and
Althea K. Nagai, Ph.D.

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Linda Chavez, President
Center for Equal Opportunity
815 15th Street, NW, Suite 928, Washington, DC 20005
Phone: 202-639-0803
Fax: 202-639-0827
http://www.ceousa.org

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Executive Summary

- Both the United States Military Academy at West Point and the United States Naval Academy at Annapolis show a substantial academic qualifications gap between black and white applicants who have been accepted for future enrollment. The Army's gap is smaller than the Navy's gap.
- Both the U.S. Military Academy and the U.S. Naval Academy also show a smaller academic qualifications gap between white and Hispanic applicants who have been accepted for future enrollment. The Army's gap is considerably less than the Navy's gap. We conclude that preferences do not operate on behalf of the Army's Hispanic admittees.
- There is no evidence that Asian applicants receive special preference at either of the military academies. In fact, there is evidence that the Asian applicants with the same academic qualifications find it somewhat more difficult to obtain admission than do their white counterparts at both academies.
- Earlier studies have found that the higher the school's academic standards, the greater the use of racial and ethnic preferences. Consistent with this, we find a substantially greater degree of preference in admissions at the U.S. Naval Academy than at the U.S. Military Academy.
- Both the U.S. Military Academy and the U.S. Naval Academy routinely reject many white and Asian applicants with higher test scores and grades than black applicants who are admitted. However, because of the stated importance of non-academic qualifications in the admissions process, we cannot be certain that these large numbers of white and Asian rejectees are more qualified than are black and Hispanic admittees.
- The four-year graduation rates of white and Asian students are higher than those of blacks and Hispanics at both academies. This is consistent with the existence of racial and ethnic preferences and similar to gaps which we have found elsewhere, indicating that preferences have a negative impact on graduation rates.
- There is no evidence that the academies discriminate either for or against women, at least as far as academic qualifications are concerned. While male admittees score better on math SATs, female admittees score better on verbal SATs and have superior high school rank.
- At both academies, women are less likely to graduate in four years than are men. This finding, unusual in that women are normally more likely to graduate from college on time than are men, suggests the possibility that admissions preferences for women are used with regard to non-academic admissions factors.

ERRATUM

In Figure 4 on page 7, the median verbal SAT scores at the U.S. Naval Academy should be 527 for Hispanics and 580 for whites (rather than 490 and 525, respectively—which were the 25th percentile scores). Therefore, the white-Hispanic difference in verbal SATs should be 53 rather than 35. This error does not change any of the conclusions in the report.

Caveat

One important caveat is in order. In most institutions of higher learning, academic qualifications—measured principally by grade point average and performance on the SAT or ACT standardized tests—are overwhelmingly the focus of the admissions process. This is less true at the service academies, for two reasons.

First, other qualities are weighed heavily by the academies themselves. According to the admissions office of West Point, for instance, academic qualifications make up 60 percent of the admissions decision, with 30 percent based on leadership qualities and 10 percent on the physical aptitude test given to applicants. Second, the service academies are not the sole arbiters of admissions, but are limited to choosing among the nominees they receive from U.S. Senators and Representatives and other officials (who sometimes rank their nominees themselves). Accordingly, not only are applicants judged in significant part by non-academic measures, but the applicant pool itself—made up of all nominees—may also be a product of non-academic considerations.

Nonetheless, academic qualifications are given the most weight by the academies, and we have no reason to suppose that the non-academic qualifications of applicants are likely to favor one racial or ethnic group over another. Accordingly, evidence of significant gaps between racial or ethnic groups in the academic standards met by those admitted remain evidence that preferences based on race or ethnicity are being used.

Introduction

For more than 20 years, racial and ethnic preferences have played a key role in how admissions officers at the nation's public and private colleges and universities have chosen undergraduate classes. A system of preferences establishes different standards of admission for individuals based upon their racial or ethnic background, with some students held to a higher standard and others admitted to a lower standard. Earlier in this century, some colleges and universities denied admissions to Jews, blacks, women, and members of other racial and ethnic groups even when their grades, test scores, and other measures of academic achievement surpassed those of white males who were offered an opportunity to enroll. The passage of new civil rights legislation in the 1960s made this kind of discrimination illegal.

Since then, however, many colleges and universities created "affirmative action" programs meant to boost the enrollment of students whose backgrounds previously had excluded them from pursuing a higher education—especially blacks and, to a lesser extent, Hispanics—by granting them preferences during the admissions process. These policies, when their existence was made public, immediately became controversial, and they remain so today. Defenders of racial preferences claim that these policies are not discriminatory and help administrators choose between equally or almost equally qualified students, giving a slight edge to applicants who likely have faced discrimination or have come from disadvantaged backgrounds. Critics of racial preferences say that the advantages they confer on certain

applicants are much greater than supporters are willing to admit, and that in any event they are no better than other discrimination.

Public colleges and universities have seen their ability to use racial and ethnic preferences increasingly restricted by federal courts. The enactment of California's Proposition 209 (the California Civil Rights Initiative) forbids discrimination against or granting preferences for any applicant on the bases of race, ethnicity, or gender in the public programs of the country's largest state. Grassroots activists elsewhere are working to place similar proposals on their own state ballots, and both Congress and many state legislatures have before them draft legislation modeled on the new California law.

This study examines the extent to which racial, ethnic, and gender preferences are used in the admissions policies of the U.S. Military Academy at West Point and the U.S. Naval Academy at Annapolis. It submits admissions data supplied by the academies to a rigorous statistical analysis.

This report is the latest in a series published by the Center for Equal Opportunity (CEO), a Washington, D.C.-based, public policy research organization. Earlier CEO studies have focused on the public colleges and universities of Colorado and Michigan as well as the branches of the University of California at Berkeley, Irvine, and San Diego. Previous reports have shown that blacks and Hispanics often receive significant preferences in the undergraduate admissions process at the schools studied.

Methodology

The two service academies examined in this study represent half of the nation's four service academies. While the United States Military Academy and the United States Naval Academy provided us with information, the Air Force Academy and the Coast Guard refused to comply with our requests for the same information. The U.S. Military Academy and the U.S. Naval Academy provided the raw data for our statistical analysis of applicants for the fall 1995 class of incoming freshmen.

We received data on individual applicants, admittees, rejectees, and enrollees regarding their racial or ethnic group membership, their gender, verbal and math SAT scores, and high school class rank.

We omit from our data analyses those cases for which race or ethnicity is listed as "other," "missing," or "unknown." We also omit Native Americans because of their small numbers in this context. Lastly, we omit cases with missing academic data.

We do not report group means for test scores or class ranks. Using group means places greater weight on extreme values than is warranted. A few unusually high or low scores can have a substantial effect on the value of the mean. Standard deviations, which are based on squared deviations from the mean, are even less useful for describing the spread of cases for asymmetrical, badly skewed distributions. This is because standard deviations reflect the mathematical square of these extreme values.

The median, however, and related statistics are far less affected by the values of extreme cases. The median represents the middle of the distribution so that 50 percent of all students have higher scores, and 50 percent have lower scores.

We also report scores at the 25th and 75th percentile, again to deal with the problem of extreme cases. While the median represents the middle of the distribution, the 25th and 75th percentile scores

taken together represent the actual spread of scores. For example, a 25th percentile score of 650 means that 25 percent of scores were below 650, while 75 percent of scores were above it. A 75th percentile score of 700 means that 75 percent of scores were below 700, while 25 percent were above 700.

Applications and Admissions

Admission to either the U.S. Naval Academy or the U.S. Military Academy is very difficult. In 1995, only 14.8 percent of applicants were admitted by the U.S. Naval Academy and 13.5 percent of all applicants were admitted to the U.S. Military Academy.

Figure 1

Racial and Ethnic Differences in Admission Rates

	Blacks	Hispanics	Asians	Whites
U.S. Military Academy	9.5%	11.3%	15.5%	14.0%
U.S. Naval Academy	11.2%	19.6%	13.1%	14.9%

Figure 1 shows that at the U.S. Naval Academy, Hispanics are admitted at the highest rate, followed by whites, Asians, and blacks. At the U.S. Military Academy, the Asian admissions rate is highest, followed by the white rate, the Hispanic rate, and the black rate.

Figure 2 shows that the male admissions rate is higher than the female rate at both the U.S. Naval Academy and the U.S. Military Academy.

Figure 2

Sex Differences in Admission Rates

	Men	Women
U.S. Military Academy	13.6%	12.7%
U.S. Naval Academy	14.4%	13.0%

In addition to high academic standards, applicants for admission to the service academies must satisfy other stringent requirements generally not asked of applicants to civilian colleges and universities. According to the 1997 edition of *Barron's Profiles of American Colleges*: "Candidates [for admission to the Naval Academy] must be unmarried with no dependents, U.S. citizens of good moral character, and between 17 and 21 years of age." They "must obtain an official nomination from congressional or military sources. An interview is conducted, and medical and physical examinations must

be passed to qualify for admission" (p. 703). Likewise, "Applicants [to the U.S. Military Academy] must be 17-22 years old, a U.S. citizen at the time of enrollment . . ., unmarried, and not pregnant or legally obligated to support children." They "must be nominated to admission by members of the U.S. Congress or executive sources." "Applicants must be qualified academically, physically, and medically . . ." (p. 1075).

Racial and Ethnic Differences in Admittee Qualifications

We examine three pairs of differences in qualifications: white-black, white-Hispanic, and white-Asian. Treating each pair of comparisons separately makes it easier to see whether substantial differences in racial and ethnic differences exist, for which groups they are greatest, and whether the gaps are greater at West Point or Annapolis.

Differences between Whites and Blacks

White admittees on average have considerably better credentials than do blacks, regardless of whether we examine SATs or class rank. Figure 3 shows the white-black gap in math SATs, verbal SATs, and high school rank. The black-white gap for math SATs at the U.S. Naval Academy (NA) is 80 points, and at the U.S. Military Academy (MA) it is 60 points. The black-white gap for verbal SATs at the U.S. Naval Academy is 70 points, and at the U.S. Military Academy it is 40 points. The difference in median class rank between whites and blacks at the U.S. Naval Academy is 21, while the difference in median class rank between whites and blacks at the U.S. Military Academy is 4.

Figure 3

Black-White Admittee Differences

Verbal SAT Scores			
	Blacks	Whites	Difference in Median Scores
MA	510	550	40
NA	510	580	70
Math SAT Scores			
	Blacks	Whites	Difference in Median Scores
MA	590	650	60
NA	590	670	80
High School Rank			
	Blacks	Whites	Difference in Median Rank
MA	18	14	4
NA	36	15	21

This is strong evidence of racial preferences in favor of blacks, especially at the U.S. Naval Academy.

Differences between Whites and Hispanics

Although white-Hispanic differences are smaller than white-black differences, white admittees have better credentials than do Hispanics. Figure 4 shows the white-Hispanic gaps in math SATs, verbal SATs, and median class rank. The white-Hispanic math SAT gap at the U.S. Naval Academy is 45 points, while at the U.S. Military Academy the white-Hispanic gap is a much less significant 10

points. The white-Hispanic verbal SAT gap at the U.S. Naval Academy is 35 points, while at the U.S. Military Academy the white-Hispanic gap is a moderate 20 points. The difference in median class rank between whites and Hispanics at the U.S. Naval Academy is 17, while the difference in median class rank between whites and Hispanics at the U.S. Military Academy is 2.5.

This is evidence of preferences in favor of Hispanics at the U.S. Naval Academy, but far less evidence of such preferences at the U.S. Military Academy.

Figure 4

Hispanic-White Admittee Differences

Verbal SAT Scores			
	Hispanics	Whites	Difference in Median Scores
MA	530	550	20
NA	490	525	35
Math SAT Scores			
	Hispanics	Whites	Difference in Median Scores
MA	640	650	10
NA	625	670	45
High School Rank			
	Hispanics	Whites	Difference in Median Rank
MA	16.5	14	2.5
NA	32	15	17

Differences between Whites and Asians

Asian admittees have better median test scores and median class rank at both academies than do their white counterparts. Figure 5 shows the white-Asian gaps in math SATs, verbal SATs, and median class rank. The white median math SAT at the U.S. Naval Academy is 20 points lower than the Asian score, while the white-Asian gap at the U.S. Military Academy is 25 points. The white-Asian gap in the verbal SAT at the U.S. Naval Academy is 10 points, while the white-Asian gap at the U.S. Military Academy is 25 points. The Asian median class rank at the U.S. Naval Academy is 8 places higher than the white class rank, while the white-Asian gap at the U.S. Military Academy is 3 places.

Figure 5

Asian-White Admittee Differences

Verbal SAT Scores			
	Asians	Whites	Difference in Median Scores
MA	575	550	-25
NA	590	580	-10
Math SAT Scores			
	Asians	Whites	Difference in Median Scores
MA	675	650	-25
NA	690	670	-20
High School Rank			
	Asians	Whites	Difference in Median Rank
MA	11	14	-3
NA	7	15	-8

Accordingly, there is no evidence that Asians benefit from racial preferences at either of the academies, and in fact there is some evidence that they may suffer from discrimination.

Gender Differences in Admittee Qualifications

We examine gender differences in admittees in the same manner as we did racial and ethnic differences. Figure 6 shows that the male-female differences are mixed. Men outscore women on the math SAT at the U.S. Naval Academy by 15 points, and by 30 points at the U.S. Military Academy. But women outscore men by 15 points on the verbal SAT at the U.S. Naval Academy, and by 10 points at the U.S. Military Academy. Women have a better median class rank at both service academies than do their male counterparts. The male-female gap in median class rank at the U.S. Naval Academy is 8 places, while the male-female gap at the U.S. Military Academy is 6 places.

At both academies, in sum, male admittees have better math SAT scores while female admittees have better verbal SAT scores and higher class rank. There is no evidence of sex discrimination against men or against women.

Figure 6

Women-Men Admittee Differences

Verbal SAT Scores			
	Women	Men	Difference in Median Scores
MA	550	540	-10
NA	580	565	-15
Math SAT Scores			
	Women	Men	Difference in Median Scores
MA	620	650	30
NA	655	670	15
High School Rank			
	Women	Men	Difference in Median Rank
MA	10	16	-6
NA	11	19	-8

Computing the Odds of Admission

Racial and Ethnic Group Membership

By combining all the data discussed so far, we can develop models that predict the probability of admission at each school for members of the different racial and ethnic groups and each gender, holding constant their qualifications. This can be done by computing prediction equations for the admissions decision by race and ethnicity (and by sex), and including test scores and high school class rank as statistical control variables.

The technique we employ for this purpose is logistic regression. Computing logistic regression equations allows us to derive the odds of admission by racial or ethnic group relative to whites.[1] The

[1] For a much more complete discussion, see *Applied Logistic Regression*, by David W. Hosmer and Stanley Lemeshow (New York: John Wiley and Sons, 1989).

odds ratio is somewhat like a correlation coefficient, except instead of varying from −1 to 1, it varies between zero and infinity. An odds ratio of 1 means that the odds (of admissions) for the two groups are equal. It is equivalent to a correlation of zero. An odds ratio greater than 1 means that the odds of members of one group being admitted are greater than those for members of the other group being admitted. An odds ratio of less than 1 is the reverse. The former is similar to a positive correlation, and the latter similar to a negative correlation.

When we predict admissions status at the U.S. Naval Academy, we use ethnic group membership, gender, SAT scores, and high school rank as predictor variables. Our results are displayed in Figure 7. The black-to-whites odds of admission are 4.44 to 1, the Hispanic-to-white odds are 3.32 to 1, and the Asian-to-white odds are .67 to 1.[2] The black and Hispanic results are statistically significant at better than the $p < .0001$ level, and the Asian results are significant at the $p < .034$ level of statistical significance.[3]

These findings are consistent with the admittee data discussed earlier. They provide substantial evidence of the existence of racial preferences at the U.S. Naval Academy in favor of blacks relative to whites and in favor of Hispanics relative to whites, and somewhat weaker evidence of discrimination against Asians, again relative to whites.

When we predict admissions status at the U.S. Military Academy, we use the same variables as predictors we did in predicting admissions to the Naval Academy. Our results are again displayed in Figure 7. The black-to-white odds of admission are 1.94 to 1, the Hispanic-to-white odds are 1.20 to 1, and the Asian-to-white odds are .68 to 1. The black results are significant at better than the $p < .0001$ level of statistical significance. The Hispanic results are not statistically significant ($p < .23$) at the conventional level of statistical significance. The Asian results are statistically significant at the $p < .0042$ level of statistical significance.

We find evidence of racial preferences in favor of blacks as opposed to whites, although the degree of preference shown is relatively modest. We do not find evidence of preferences for Hispanics. There is also some evidence of discrimination against Asians in favor of whites. The amount of preference, however, is smaller than the black-white difference reported above.

To summarize, we find preferences in favor of blacks at both academies, preferences in favor of Hispanics at Navy but not at Army, and preferences against Asians at both academies.

We find that the odds ratios for blacks and Hispanics relative to whites are significantly greater at the U.S. Naval Academy than at the U.S. Military Academy. In fact the U.S. Naval Academy odds ratios are double the size of the U.S. Military Academy ratios.[4] This is to be expected given that it is generally the case that the more demanding a school is in its academic qualifications, the greater the degree of racial and ethnic preference it will show. We have found this to be the case in the colleges and universities we have studied in California, Colorado, and Michigan. While both service academies are rated by *Barron's* as "most competitive," the average test scores of admittees are higher at

2 To express this as a number greater than 1, the white-to-Asian odds are 1.49 to 1. This odds ratio has the same substantive meaning as the odds ratio reported in the text, but it is expressed in terms of whites, not Asians. It is computed by taking the reciprocal of the .67, which is 1.49.

3 The equations providing these results are not shown here. They are available from the author upon request.

4 The University of Michigan at Ann Arbor had a black-to-white odds ratio of 173 to 1. The Ann Arbor ratio is 90 times as great as the Army ratio.

Figure 7

Odds of Admissions

	U.S. Military Academy	U.S. Naval Academy
Black to White	1.94 to 1*	4.44 to 1*
Hispanic to White	1.20 to 1	3.32 to 1*
Asian to White	0.68 to 1*	0.67 to 1*
Male to Female	1.04 to 1	1.19 to 1

Figure 7 shows the odds that the school will admit a black, Hispanic, or Asian applicant instead of a white one, or a male applicant instead of a female one, when the applicants are equally qualified and the school has only a single spot for them.
* Statistically significant at $p < .05$ or better.

Annapolis than at West Point. The median math admittee scores 670 at Navy and 640 at Army, and the median verbal admittee scores 570 at Navy and 540 at Army.

Odds of Admission by Gender

The gender odds ratio comparing men to women at the Navy is 1.19.[5] At the Army the same odds ratio is 1.04. Neither of these results achieves the conventional $p<.05$ level of statistical significance (see Figure 7). These confirm our earlier conclusion that there are no gender preferences as far as academic standards are concerned on behalf of either men or women.[6]

How Preferences Affect Graduation Rates

If students gain admission to colleges and universities for reasons other than their academic preparation, it is likely that they will face greater burdens in school than their peers who have met a higher academic standard of admission. They may in fact not earn their degrees. So it makes sense that racial and ethnic preferences will have a negative effect on the graduation rates of students who supposedly benefit from them.

5 The women-to-men odds ratio is .84.

6 These results control for race and ethnicity, just as the racial and ethnic comparisons control for gender.

The military academies are unlike civilian colleges and universities, both in daily life on campus and in their admissions procedures. The admissions procedure takes into account factors other than academic ones.

Figure 8

Four-Year Graduation Rates

	U.S. Military Academy	U.S. Naval Academy
Blacks	67.6%	66.3%
Hispanics	71.1%	68.8%
Whites	71.5%	76.6%
Asians	78.2%	84.5%
Women	59.6%	69.5%
Men	68.9%	76.6%

Nonetheless, the average four-year graduation rates by racial and ethnic group fits the odds ratios reported above remarkably well (see Figure 8). First, the ethnic groups line up in the expected order at both academies. Blacks have the lowest graduation rates, followed by Hispanics, whites, and Asians, paralleling the size of the admissions odds ratios. Second, the largest gap, between Asians and blacks, also parallels the odds ratios. Third, the gap is 10.6 percent at West Point, but 18.2 percent at Annapolis, which reflects the fact that admissions is slightly more difficult and standards slightly higher at Annapolis than West Point.

Gender differences in graduation present a different picture. The similar academic credentials of men and women cadets or midshipmen indicate that there should be no gender differences in graduation rates. Also, in civilian schools women are generally more likely to finish college than are their male counterparts—see 1997 *Digest of Education Statistics*, p. 324—suggesting the possibility that women ought to be more likely to graduate than men in the military as well.

Nonetheless, at the academies men are more likely to graduate than are women. The percentage difference is 9.3 percent in the Army and 7.1 percent in the Navy. There are several possible explanations for this difference. The extensive physical requirements may play a role even though they were adjusted in the 1970s when the academies first began to admit women. It also may be the case that the overwhelmingly male environment is difficult for women enrollees. Still another explanation might be that the males admitted to the academies are more committed, responsible, and dedicated to their future careers than are male freshmen at civilian colleges or universities. This may result in a higher completion rate than elsewhere.

Black Admittees vs. White Rejectees

The use of racial preferences would inevitably lead to less qualified black and Hispanic students taking the place of more qualified white and Asian students. And both Annapolis and West Point rejected large numbers of Asian and white applicants despite the superiority of their academic credentials to many black admittees.

At the Naval Academy, 131 Asian rejectees (41 percent) and 2,640 white rejectees (42 percent) have both math and verbal SATs equal to or higher than the black admittee math and verbal SAT medians. There are 69 Asians (50 percent) and 1,232 whites (25 percent) rejected by the U.S. Naval Academy who attained a class rank equal or better to the rank of the black admittee median. When these results are combined, there are 39 Asians and 794 whites rejected by the U.S. Naval Academy who had both equal or higher class rank and had verbal and math SAT scores equal to or higher than the black medians.

A similar situation occurs at West Point. There are 155 Asian rejectees (43 percent) and 1,647 white rejectees (33 percent) who have both math and verbal SATs equal to or higher than the black admittee math and verbal SAT medians. There are 160 Asians (38 percent) and 2,626 whites (37 percent) rejected by the U.S. Military Academy who attained a class rank equal or better than the rank of the black admittee median. When these results are combined, there are 80 Asians and 909 whites rejected by the U.S. Military Academy who had both equal or higher class rank and verbal and math SAT scores equal or higher than the black admittee median.

These findings provide additional evidence showing preference in admittance to the service academies—subject again, to the caveat on page 3 that disparities in academic qualifications may be less significant in the context of the service academies than for other institutions of higher education.

Individual School Analysis

United States Military Academy: Racial and Ethnic Group Differences

Applicants, Admittees, and Enrollees

In 1995, 11,954 individuals applied for admission to the U.S. Military Academy. Of these, 1,611 were admitted. 1,224 subsequently enrolled. The overwhelming proportion of applicants, admittees, and enrollees were white.

U.S. Military Academy applicants

- 10 percent black
- 5 percent Hispanic
- 4 percent Asian
- 80 percent white

U.S. Military Academy admittees

- 7 percent black
- 4 percent Hispanic
- 5 percent Asian
- 83 percent white

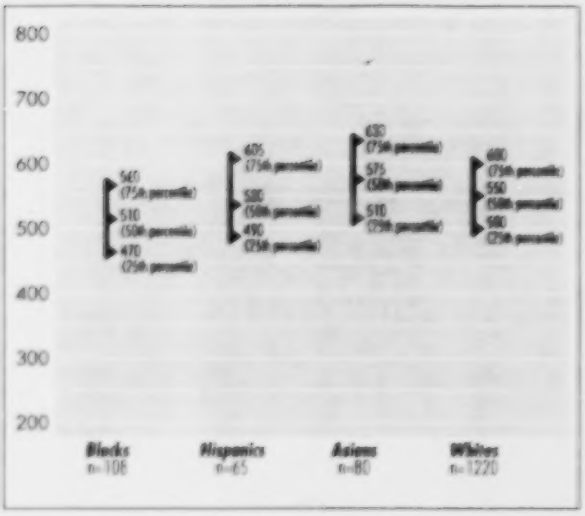
U.S. Military Academy admission rates
- 9.5 percent of black applicants
- 11.3 percent of Hispanic applicants
- 15.5 percent of Asian applicants
- 14.0 percent of white applicants

U.S. Military Academy enrollees
- 7 percent black
- 4 percent Hispanic
- 5 percent Asian
- 84 percent white

Differences in Verbal SAT Scores

Figure 9 shows the range of verbal SAT scores by ethnic group. Group differences in SAT verbal scores are substantial, but there is considerable overlap. White and Asian admittees have higher verbal scores than do blacks, while the Hispanic average is in the middle. The median white score is 40 points higher than the median verbal score for blacks, while the difference between Asian and black medians is 65 points.

Figure 9
Verbal SAT Scores
U.S. Military Academy



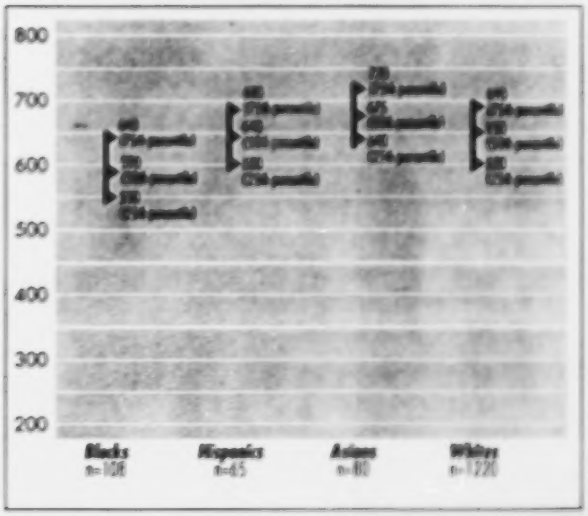
Differences in Math SAT Scores

Group differences in math SAT scores are larger than for verbal scores. Black and Hispanic admittees have lower math SAT scores than do white and Asian admittees.

The Asian-black gap is the largest. The Asian 25th percentile score equals the 75th percentile score for blacks. This means that 75 percent of all blacks score equal or lower than all but 25 percent of all Asians. The Asian median is 85 points higher that the black median.

The white-black gap is somewhat smaller. The median white math score is 60 points higher than that for blacks, and the white median is higher than the black 75th percentile.

Figure 10
Math SAT Scores
U.S. Military Academy



Differences in High School Rank

Racial/ethnic group members differ in their high school class standing. Since we were not provided with information about the size of any applicant's class, we can report class standing only as a raw number rather than as a percentile. We describe differences in high school rank by comparing the median class rank for each ethnic group.

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The differences in median class rank are relatively small. However, the average Asian and white class ranks are higher than the average class rank for Hispanics and blacks. See Figure 11.

Rejectees vs. Admittees

The U.S. Military Academy rejected 442 Asians and 8,236 whites. Some of those denied admissions had superior academic credentials compared to many black admittees. Taking math scores, verbal scores, and high school rank together, 80 Asians and 909 whites were rejected by the U.S. Military Academy with equal or higher test scores and class ranks compared to the average black admittee.

60 percent of Asian rejectees and 48 percent of white rejectees have math SAT scores equal to or higher than the black admittee median. 54 percent of Asian rejectees and 48 percent of white rejectees have verbal SAT scores equal to or higher than the black admittee median.

Many Asian and white rejectees also have higher average class ranks. 38 percent of Asians and 37 percent of whites rejected by the U.S. Military Academy attained a class rank equal or better than the rank of the black admittee median.

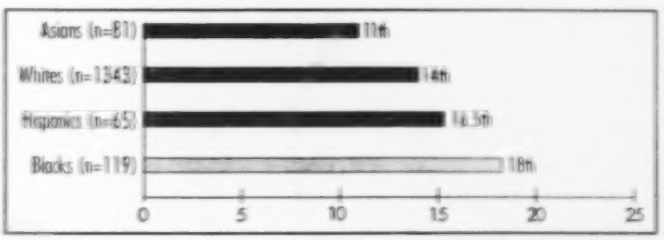
These findings provide evidence of racial preference in admittance to the U.S. Military Academy. The admissions process works in favor of many black applicants against better qualified whites and Asians.

Four-Year Graduation Rates

- 67.6 percent of blacks graduated
- 71.1 percent of Hispanics graduated
- 71.5 percent of whites graduated
- 78.2 percent of Asians graduated

There is only a small disparity in graduation rates. This is consistent with the relatively modest degree of racial preference discovered in the odds ratio data presented above.

Figure 11
Median High School Rank
U.S. Military Academy



United States Military Academy: Gender Differences

Applicants, Admittees, and Enrollees

U.S. Military Academy applicants
- 86 percent male
- 14 percent female

U.S. Military Academy admittees
- 86 percent male
- 14 percent female

U.S. Military Academy admission rates
- 14 percent of male applicants
- 13 percent of female applicants

U.S. Military Academy enrollees
- 87 percent male
- 13 percent female

Differences in Verbal SAT Scores

Figure 12 displays the verbal SAT scores of male and female admittees. Women have a higher score at the 50th and the 75th percentiles, and are only three points lower at the 25th percentile.

Figure 12
Gender Differences in Verbal SAT Scores
U.S. Military Academy

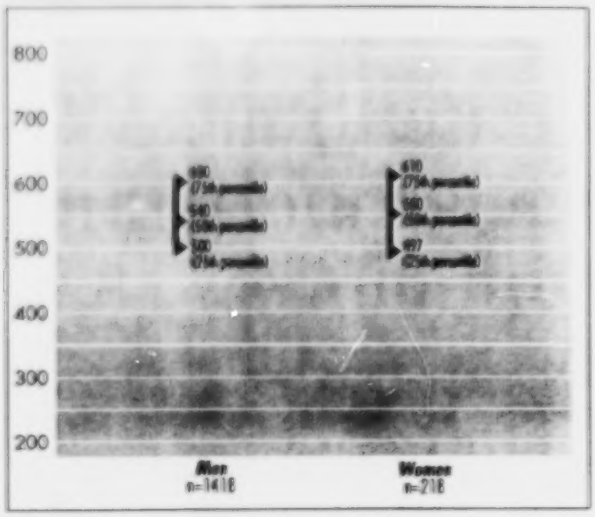
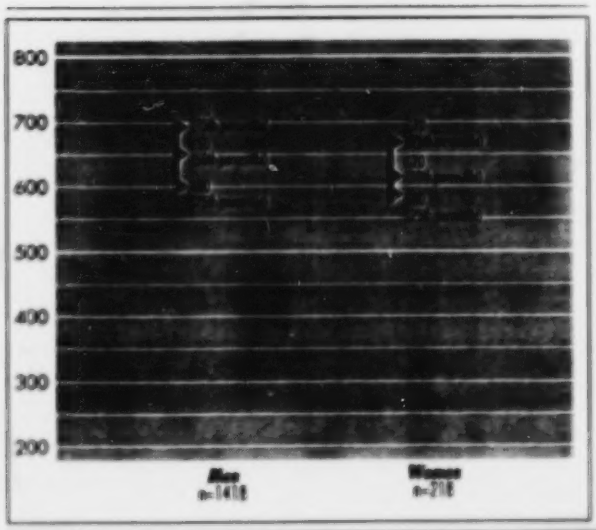


Figure 13
Gender Differences in Math SAT Scores
U.S. Military Academy



Differences in Math SAT Scores

According to Figure 13, on average men score better than women, but the gap is smaller than that between blacks and whites. Men have higher math scores at all three percentiles.

Differences in High School Rank

As measured by high school rank, women are slightly more qualified than are men. The median high school rank of a female admittee is tenth in her high school class. The typical male admittee ranked sixteenth. See Figure 14.

Four-Year Graduation Rates

- 59.6 percent of women
- 68.9 percent of men

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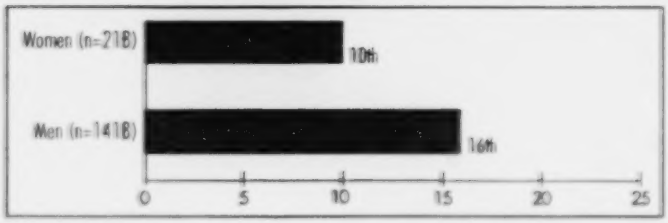
Figure 14
Gender Differences in High School Rank
U.S. Military Academy



Women graduate at a lower rate compared to men. This lower rate occurs despite women's higher verbal scores and higher high school rank. There is, however, a 30-point gap in median math scores between women and men.

United States Naval Academy: Racial and Ethnic Group Differences

Applicants, Admittees, and Enrollees

In 1995, 9,843 individuals applied for admission to the U.S. Naval Academy. 12.2 percent were admitted, and 1,146 individuals enrolled.

U.S. Naval Academy applicants
- 9 percent black
- 6 percent Hispanic
- 4 percent Asian
- 82 percent white

U.S. Naval Academy admittees
- 7 percent black
- 8 percent Hispanic
- 4 percent Asian
- 82 percent white

U.S. Naval Academy admissions rate
- 11.2 percent of black applicants
- 19.6 percent of Hispanic applicants
- 13.1 percent of Asian applicants
- 14.9 percent of white applicants

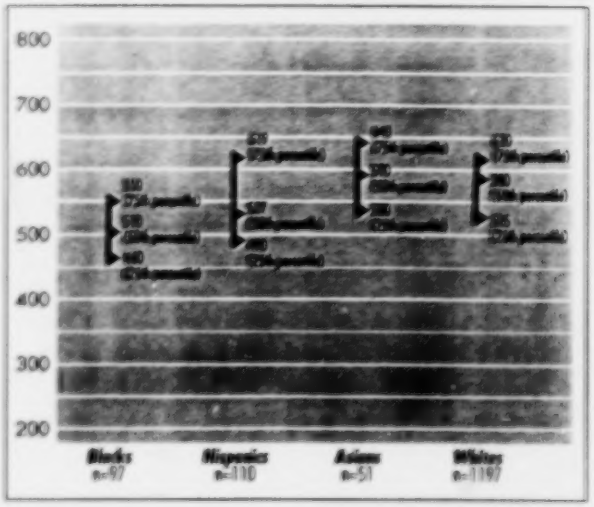
U.S. Naval Academy enrollees
- 8 percent black
- 8 percent Hispanic
- 3 percent Asian
- 81 percent white

Differences in Verbal SAT Scores

Figure 15 shows the differences in verbal SAT scores among racial and ethnic groups. The differences are substantial, but there is some overlap in scores.

White and Asian admittees have significantly higher verbal scores than do blacks. Hispanics average in the middle. The median white score is 70 points higher than the median verbal score for blacks, while the difference between Asian and black medians is 80 points. Both the Asian and the white 25th percentiles are higher than the black median.

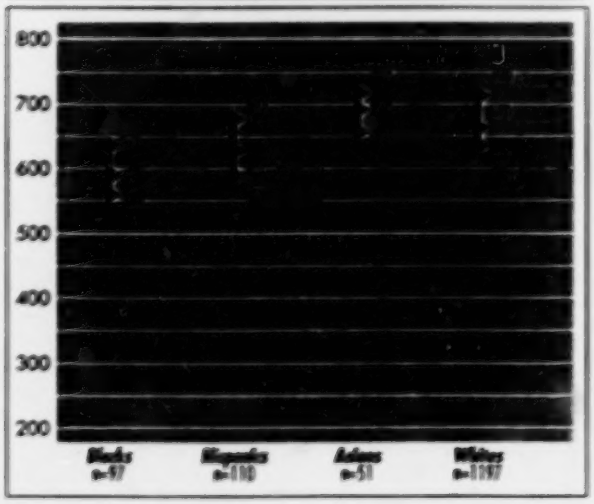
Figure 15
Verbal SAT Scores
U.S. Naval Academy



Differences in Math SAT Scores

Figure 16 shows the differences in math SAT scores. Black and Hispanic admittees have lower scores than do whites and Asians. The gap between Hispanics and the latter groups is smaller. The Asian-black gap is large. The Asian 25th percentile score is higher than the 75th percentile score for blacks. This means that more than 75 percent of all blacks score lower than all but 25 percent of all Asians. The Asian median is 100 points higher that the black median.

Figure 16
Math SAT Scores
U.S. Naval Academy



The white-black gap is somewhat smaller, but still quite large. The median white math score is 80 points higher than for blacks, and the white 25th percentile is close to the black 75th percentile. The white-Hispanic gap is smaller, so that the white median is close to the Hispanic 75th percentile.

Differences in High School Rank

Figure 17 reports median class rank of admittees. Asian and white admittees ranked higher in their high school classes compared to blacks and Hispanics. Asian admittees typically ranked seventh in their high school class, while white admittees on average ranked fifteenth. In contrast, Hispanics on average ranked thirty-second; and blacks, on average, ranked thirty-sixth.

Rejectees vs. Admittees

The U.S. Naval Academy rejected 338 Asian and 6,826 white applicants. There were many rejectees that had superior academic credentials compared to many black admittees. Taking test scores

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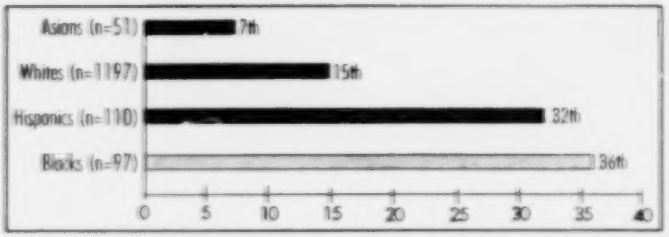
Figure 17
Median High School Rank
U.S. Naval Academy



and rank together, there were 39 Asian and 794 white rejectees with equal or better qualifications compared to the average black admittee.

Fifty-nine percent of Asian rejectees and 58 percent of white rejectees have math SAT scores equal to or higher than the black admittee median, while 51 percent of Asian and 57 percent of white rejectees have verbal SAT scores equal to or higher than the black admittee median. Similarly, 50 percent of Asian rejectees and 25 percent of white rejectees had a class rank equal or better than the median rank of black admittees.

Four-Year Graduation Rates

- 66.3 percent of blacks
- 68.8 percent of Hispanics
- 84.5 percent of Asians
- 76.6 percent of whites

A larger percentage of whites and Asians graduate, compared to blacks and Hispanics. The racial/ethnic disparity in the proportion who graduate is likely to be due in some part to the fact that a number of blacks and Hispanics at the U.S. Naval Academy have weaker academic credentials compared to entering white and Asian students. This finding is consistent with the results reported above.

U.S. Naval Academy: Gender Differences

Applicants, Admittees, and Enrollees

U.S. Naval Academy applicants
- 82 percent male
- 18 percent female

U.S. Naval Academy admittees
- 82 percent male
- 18 percent female

U.S. Naval Academy admissions rate
- 14.4 percent of male applicants
- 13.0 percent of female applicants

U.S. Naval Academy enrollees
- 83 percent male
- 17 percent female

Differences in Verbal SAT Scores

Figure 18 shows the differences in verbal SAT scores between men and women. Men's scores are lower than women's scores at the 25th, 50th, and 75th percentiles. The male-female gap in verbal scores is less than those among ethnic groups.

Differences in Math SAT Scores

Figure 19 shows the differences in math SAT scores between men and women. On average men score slightly better than women, but the 15 point difference in medians is much less than the racial and ethnic gaps found above.

Figure 19
Gender Differences in Math SAT Scores
U.S. Naval Academy

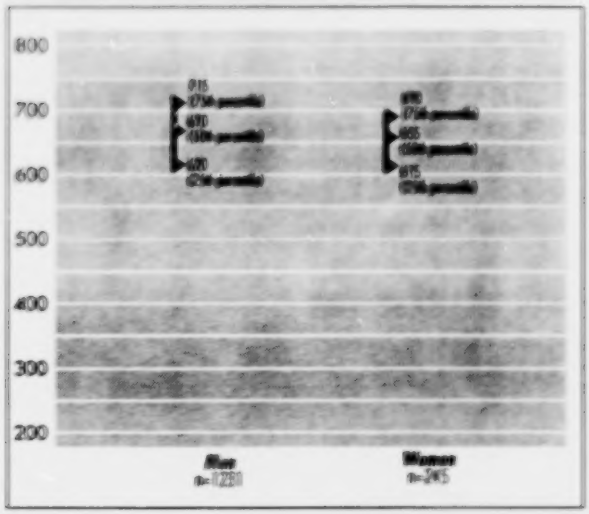


Figure 20
Gender Differences in Median High School Rank
U.S. Naval Academy

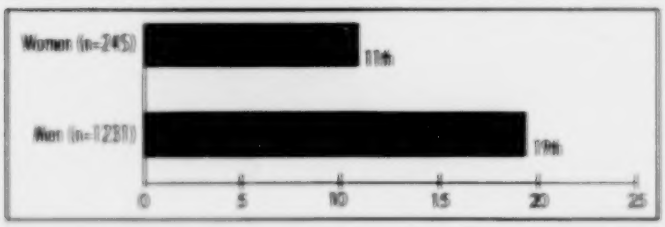
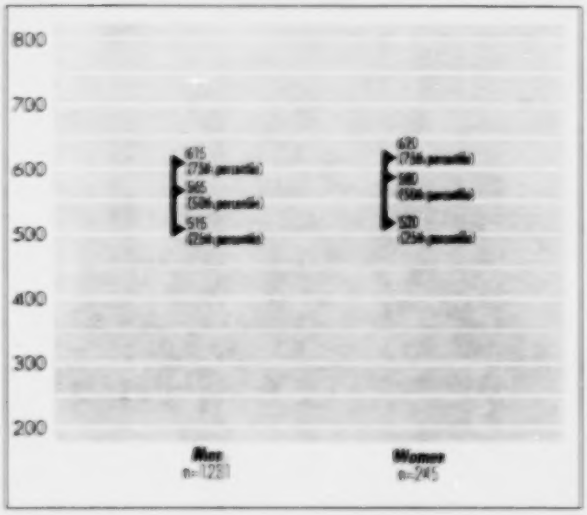


Figure 18
Gender Differences in Verbal SAT Scores
U.S. Naval Academy



Differences in High School Rank

Women admittees had a median rank of eleventh.

Men had a median rank of nineteenth.

Figure 20 shows the median high school class ranks of men and women.

Four-Year Graduation Rates

69.5 percent of women

76.6 percent of men

Like the U.S. Military Academy, the U.S. Naval Academy graduates a smaller proportion of women compared to men. Women are less likely to finish, despite their higher verbal scores and higher high school rank (and only a 15-point gap in median math scores compared to men).

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CENTER FOR EQUAL OPPORTUNITY

The Center for Equal Opportunity (CEO) is a project of the Equal Opportunity Foundation, a non-profit research institution established under Section 501(c)(3) of the Internal Revenue Code. CEO sponsors conferences, supports research, and publishes policy briefs and monographs on issues related to race, ethnicity, immigration, and public policy.

Linda Chavez, President